



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/022,022

12/13/2001

Peter V. Boesen

P05419US0

2798

22885 7590 11/12/2010  
MCKEE, VOORHEES & SEASE, P.L.C.  
801 GRAND AVENUE  
SUITE 3200  
DES MOINES, IA 50309-2721

EXAMINER

ARMSTRONG, ANGELA A

ART UNIT

PAPER NUMBER

2626

NOTIFICATION DATE

DELIVERY MODE

11/12/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patatty@ipmvs.com



### **DETAILED ACTION**

1. This Office Action is in response to the amendment filed August 30, 2010 to add new claims 26-30. Claims 1-13 and 21-30 are pending.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-13 and 21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 2002/0010590) in view of Bybee (EP 1017 252 A2)

3. Regarding claims 1, 4-5, 8-9, 11-13, 21-26 and 28-30, Lee teaches a method of voice communication comprising used with a headset [p0024;0049]: selecting one of a plurality of microphones to detect a selected voice communication by a person other than the user (paragraphs 0023-0024, since the external microphone 101b is input to the recognizer); receiving a selected voice communication of a first language from the selected microphones (paragraph 0023); translating the selected voice communication from the first language to a second language by an intelligent control (113a), the second language different from the first to create a translated voice communication (paragraph 0025); transmitting communications using transmitters (paragraphs 0052-0065); and transducing the translated voice communication at a speaker (paragraph 0024).

Lee does not teach the earpiece having a housing in which the earpiece is adapted for being worn by the user. Bybee discloses a hearing aid system includes an earpiece for producing sound representative of a listening environment, implementing a module worn in

Art Unit: 2626

wireless communication with the earpiece, a plurality of microphones to receive incoming sound signals from the listening environment, such that circuitry in the module analyzes the incoming sound signals received by the plurality of microphones and generates control signals to govern the production of sound by the earpiece (paragraphs [0006-0011; 0013-0016; 0022-0026]). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Lee to provide an earpiece housing adapted for being worn by a user, as suggested by Bybee, for the purpose of providing a portable convenient unit to the user.

Lee does not teach a plurality of microphones to detect a selected voice communication by a person other than the user. However, it was well known to provide a plurality of microphones in a communication system, for the purpose of providing improved signal processing via background noise reduction and desired signal enhancement. Bybee discloses a hearing aid system includes an earpiece for producing sound representative of a listening environment, implementing a module worn in wireless communication with the earpiece, a plurality of microphones to receive incoming sound signals from the listening environment, such that circuitry in the module analyzes the incoming sound signals received by the plurality of microphones and generates control signals to govern the production of sound by the earpiece (paragraphs [0006-0011; 0013-0016; 0022-0026]). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Lee to provide an earpiece having a plurality of microphones, as was well known in the art, for the purpose achieving improved signal processing and signal enhancement.

Regarding claims 2 and 27, the combination of Lee and Bybee teaches directional microphones (23a and 23b).

Art Unit: 2626

4. Regarding claim 3, Lee teaches transmitting the voice communication of a first language to a translation station and receiving the translated voice communication from the translation station (paragraphs 60-61).
5. Regarding claim 6, Lee teaches the second language is English (paragraph 61).
6. Regarding claim 7, Lee teaches first language is English and the second language is different from the first language (paragraph 62).

### ***Response to Arguments***

7. Applicant's arguments filed August 30, 2010, have been fully considered but they are not persuasive.

Applicant argues Lee is directed to a hearing aid device that does not send out a second language through its speaker to the user. The Examiner respectfully disagrees and argues, that Lee specifically teaches a language independent voice communication system, which includes a translation unit for translating a one language input speech to one or more corresponding other language speeches (“second language”). The translation unit comprises includes a speech recognizer for recognizing the input speech, at least one translation module electrically connected to the speech recognizer for translating the recognized first language input speech to the corresponding other language speech (“second language”) and output means (“speaker”) electrically connected to the translation modules for outputting the translated speeches. Therefore, Lee provides adequate support for a device that sends out a second language through its speaker to the user.

Art Unit: 2626

Applicant argues neither reference, Lee or Bybee, or in combination teaches a single device which takes a first language as input and provides a second language as output at the device. In response, the Examiner argues, Lee teaches a method of voice communication comprising used with a headset with an earphone [p0024;0049]: receiving a selected voice communication of a first language (paragraph 0023); translating the selected voice communication from the first language to a second language (113a), the second language different from the first to create a translated voice communication (paragraph 0025). Lee does not teach the earpiece having a housing in which the earpiece is adapted for being worn by the user. However, providing an earpiece with a housing in which the earpiece is adapted for being worn by the user was well known in the art. Bybee discloses a hearing aid system includes an earpiece for producing sound representative of a listening environment, implementing a module worn in wireless communication with the earpiece, a plurality of microphones to receive incoming sound signals from the listening environment, such that circuitry in the module analyzes the incoming sound signals received by the plurality of microphones and generates control signals to govern the production of sound by the earpiece. One of ordinary skill in the art could have substituted one known element for another, and the results of the substitution would have been predictable and would have recognized the advantages of modifying the system of Lee to provide an earpiece housing adapted for being worn by a user, as suggested by Bybee, for the purpose of providing a portable convenient unit to the user.

Applicant argues neither Lee nor Bybee alone or in combination teaches a device which contains a plurality of directional microphones. In response, the Examiner argues Bybee (Figure 5; paragraph 13) specifically teaches an earpiece in which incoming sound signals are received

Art Unit: 2626

by directional and omni-directional microphones and specifically teaches “in an alternative embodiment, only one of directional microphone 23a and omni-directional microphone 23b is provided in earpiece 12.”

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELA A. ARMSTRONG whose telephone number is (571)272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

Art Unit: 2626

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Wozniak can be reached on 571-272-7632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Angela A Armstrong/  
Primary Examiner, Art Unit 2626